UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20221

## NOTICE OF ALLOWANCE AND FEE(S) DUE

32692

7590

03/26/2003

3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427 EXAMINER
KNAUSS, SCOTT A

ART UNIT

CLASS-SUBCLASS

DATE MAILED: 03/26/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,950	07/24/2001	Barry S. Carpenter	56352US002	5704

TITLE OF INVENTION: PACKAGED OPTICAL MICRO-MECHANICAL DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	· \$1600	06/26/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

**Commissioner for Patents** Washington, D.C. 20231

Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where

maintenance fee notifications	elow or directed otherwi	se in Block 1, by (a) sp	ecifying a new com	espondence ad	Idress; and/or (b) indicating a sepa	arate "FEE ADDRESS" for
32692 759 3M INNOVATIV	0 03/26/2003		Ī	ee(s) Transn	cate of mailing can only be used fo nittal. This certificate cannot papers. Each additional paper, s must have its own certificate of n	be used for any other such as an assignment or
PO BOX 33427 ST. PAUL, MN 551	33-3427		Į e	Inited States I nvelope addre	Certificate of Mailing or Trans y that this Fee(s) Transmittal is ostal Service with sufficient posta, ssed to the Box Issue Fee address he USPTO, on the date indicated b	being deposited with the ge for first class mail in an above, or being facsimile
			Γ			(Depositor's name)
				-		(Signature)
						(Date)
APPLICATION NO.	FILING DATE	FIRS	T NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,950	07/24/2001		Barry S. Carpenter		56352US002	5704
TITLE OF INVENTION: PA	CKAGED OPTICAL MI	ICRO-MECHANICAL I	DEVICE			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICA	TION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	МО	\$1300	\$	300	\$1600	06/26/2003
EXAMIN	ER	ART UNIT	CLASS-SUBCLAS	SS		
KNAUSS, SC	COTT A	2874	385-052000	<del></del>		
1. Change of correspondence CFR 1.363).  Change of corresponder Address form PTO/SB/122  Fee Address and Care a	nce address (or Change of 2) attached. n (or "Fee Address" Indic	Correspondence	2. For printing on the names of up t or agents OR, all single firm (havin attorney or agent registered patent a	o 3 registered ernatively, (2 ng as a mem ) and the na	patent attorneys ) the name of a ber a registered mes of up to 2	
PTO/SB/47; Rev 03-02 or Number is required.	more recent) attached. C	ose of a Customer	is listed, no name	vill be printed		
3. ASSIGNEE NAME AND	RESIDENCE DATA TO	BE PRINTED ON THE	PATENT (print or t	/pe)		
PLEASE NOTE: Unless an been previously submitted to (A) NAME OF ASSIGNEE	assignee is identified be the USPTO or is being	submitted under separate	ill appear on the pate cover. Completion of SIDENCE: (CITY a	of this form is	of assignee data is only appropriat NOT a substitute for filing an assig R COUNTRY)	e when an assignment has inment.
Please check the appropriate a	anciernae ontarrome on ontar	voring (will not be printed	on the notant)	□ individual	□ corporation or other private gr	mun entity. D trovernment
4a. The following fee(s) are ex			ment of Fee(s):	- Individual	a corporation or other private gr	coup chary a government
☐ Issue Fee		O A ch	eck in the amount of	the fee(s) is e	nclosed.	
☐ Publication Fee		•	nent by credit card. I			
☐ Advance Order - # of Co	pies	☐ The Deposi	Commissioner is her t Account Number _	eby authorized	d by charge the required fee(s), or c (enclose an extra copy of this i	redit any overpayment, to form).
Commissioner for Patents is r	equested to apply the Issu				ously paid issue fee to the applicati	<del></del>
(Authorized Signature)		(Date)				
NOTE; The Issue Fee and other than the applicant; a interest as shown by the reco	Publication Fee (if requ registered attorney or a ords of the United States )	ired) will not be accept gent; or the assignee of Patent and Trademark Of	ed from anyone r other party in fice.			
This collection of informatiobtain or retain a benefit by application. Confidentiality estimated to take 12 minute completed application form case. Any comments on the suggestions for reducing the Patent and Trademark Offic NOT SEND FEES OR	on is required by 37 CF y the public which is to se governed by 35 U.S.C. is to complete, including to the USPTO. Time whe amount of time you is burden, should be sen e. U.S. Department of COMPLETED FORMS Vashington, DC 20231.	R 1.311. The information file (and by the USPTC) 122 and 37 CFR 1.14. The gathering, preparing, and will vary depending upon require to complete the to the Chief Information ommerce, Washington, Into This Address.	n is required to to process) an his collection is d submitting the n the individual nis form and/or n Officer, U.S. D.C. 2023 1. DO S. SEND TO:			



#### United States Patent and Trademark Office

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United States Patent and Trademark Office
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www.nspto.gov

DATE MAILED: 03/26/2003

APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,950	(	07/24/2001	Barry S. Carpenter	56352US002	5704
32692	7590	03/26/2003		EXAMIN	ER
3M INNOVA	TIVE PRO	OPERTIES CO	OMPANY	KNAUSS, Se	COTT A
PO BOX 33427 ST. PAUL, MN		27	·	ART UNIT	PAPER NUMBER
S1.1 AOL, MIN	33133-34	21		2874	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 44 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 44 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



## United States Patent and Trademark Office

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09/911,950	07/24/2001	Barry S. Carpenter	56352US002	5704
32692	7590 03/26/2003		EXAMIN	ER
3M INNOVAT	IVE PROPERTIES C	OMPANY	KNAUSS, SO	COTT A
PO BOX 33427 ST. PAUL, MN	55133-3427	Γ	ART UNIT	PAPER NUMBER
UNITED STATE		_	2874	
			DATE MAILED: 03/26/2003	

# Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

			<i>[</i> *
	Application No.	Applicant(s)	
•	09/911,950	CARPENTER ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Scott A Knauss	2874	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED  i) or other appropriate comr  RIGHTS. This application is	in this application. If not included nunication will be mailed in due cours	se. THIS
1. $\boxtimes$ This communication is responsive to <u>the amendment filed</u>	<u>1 2/19/03</u> .		
2. The allowed claim(s) is/are <u>1-37</u> .			
3 The drawings filed on are accepted by the Examin		(0	
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority un</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ul>	ider 35 U.S.C. § 119(a)-(d)	or (t).	
<ol> <li>Certified copies of the priority documents have</li> </ol>			
<ol><li>Certified copies of the priority documents have</li></ol>			
<ol><li>Copies of the certified copies of the priority do</li></ol>	ocuments have been receiv	ed in this national stage application t	rom the
International Bureau (PCT Rule 17.2(a)).	•		
* Certified copies not received:		initial continution	
5. Acknowledgment is made of a claim for domestic priority to			
(a) The translation of the foreign language provisional  6. Acknowledgment is made of a claim for domestic priority to			
6. Acknowledgment is made of a claim for domestic priority to	under 33 0.3.0. 99 120 and	1/O1 121.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of	of this communication to file f this application. THIS TH	a reply complying with the requirem REE-MONTH PERIOD IS NOT EXT	ents noted ENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be sub-	mitted. Note the attached E son(s) why the oath or dec	XAMINER'S AMENDMENT or NOTI- laration is deficient.	CE OF
8. CORRECTED DRAWINGS must be submitted.			
(a) ☐ including changes required by the Notice of Draftspe	erson's Patent Drawing Rev	iew ( PTO-948) attached	
1) hereto or 2) to Paper No	•	,	
(b) ⊠ including changes required by the proposed drawing Examiner.	correction filed 19 Februa	ry 2003, which has been approved b	y the
(c) including changes required by the attached Examine	er's Amendment / Comment	or in the Office action of Paper No.	<del></del> ,
Identifying indicia such as the application number (see 37 CFR of each sheet. The drawings should be filed as a separate paper	1.84(c)) should be written on er with a transmittal letter add	the drawings in the top margin (not the drawings in the top margin (not the dressed to the Official Draftsperson.	e back)
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR	osit of BIOLOGICAL MA THE DEPOSIT OF BIOLOG	TERIAL must be submitted. Note SICAL MATERIAL.	the
Attachment(s)			
Attachment(s)	o□ N=#	of Informal Datast Application (DTA	152\
<ul><li>1 ☐ Notice of References Cited (PTO-892)</li><li>3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li></ul>		of Informal Patent Application (PTO- ew Summary (PTO-413), Paper No	
5 Information Disclosure Statements (PTO-1449), Paper No.	6□ Exami	ner's Amendment/Comment	
7 Examiner's Comment Regarding Requirement for Deposit	8⊠ Exami	ner's Statement of Reasons for Allow	/ance
of Biological Material	9☐ Other	•	
		Scott Knauss Art Unit 2874	

Application/Control Number: 09/911,950

Art Unit: 2874

## REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Claims 1-37, as amended, are allowed. Prior art fails to disclose a package for micromechanical device package as set forth in claim 1, wherein a first surface of a die has a micromechanical device on it, the first surface of the die comprises a die reference surface which is mounted to a package frame reference surface of a package frame, the package frame having optical interconnect alignment mechanisms formed in the first surface of the package frame, the first surface also comprising the package frame reference surface.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Terminal Disclaimer

The terminal disclaimer filed on 3/3/2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 09/911,951 has been reviewed and is accepted.

The terminal disclaimer has been recorded.

## **Drawings**

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 2/19/03 have been approved. A proper drawing correction or

Application/Control Number: 09/911,950

Art Unit: 2874

corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Knauss whose telephone number is (703) 305-5043. The examiner can normally be reached on 9-6 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308 - 4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Scott Knauss

Art Unit 2874

sak March 14, 2003

> HEMANG SANGHAVI PRIMARY EXAMINER